UNPROTECTED

Backups may be made using normal copying procedures.

COMPATIBLE

Any version of Apple II+ DOS 3.3 and ProDOS™ (Requires *Shape Mechanic* or *Apple Mechanic* software)

B1/1

$1/90

(4-044)

Font Mechanic

30 FONTS FOR SHAPE MECHANIC & APPLE MECHANIC
by MARK & JON SIMONSEN

30 NEW HI-RES TYPEFACES

30 hi-res fonts on disk, designed for Beagle's *Shape Mechanic* and *Apple Mechanic* programs (purchased separately)

Every character, from "!" to "□", may be edited with the *Mechanic* Font Editor programs. All Font Mechanic fonts are proportionally spaced.

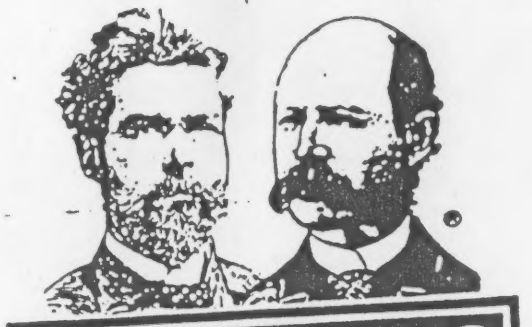
FONT UTILITIES

Quickly change the horizontal and/or vertical dimensions of a font for emphasis or special effect: SKINNY TALL SHORT

Also make shape fonts out of fonts from other sources—*DOS Tool Kit*,™ *Higher Text*,™ *Beagle Graphics*,™ etc.

SAMPLE FONTS:

Old English: abc
Invitation: abcdefghijkl
CRATE: ABCDEF
EDISON: abcdef
SANDWICH: ABC
MONGOLIAN: ab
ZEBRA: abcdef
LEAD FOOT: ab
BELLS: ABCDEF
U.S. OPEN: ABC
SO FINE: abcdef
BRANDING IRON
COUNTDOWN: abc
SUNSET: ABC
HOLLYWOOD
HOT SAUCE: abc



Font Mechanic

Fonts and Utilities for Shape Mechanic™

by Mark & Jon Simonsen

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3990 Old Town Avenue
San Diego, California 92110

TABLE OF CONTENTS

About the Disks 2
The Disk Catalog 4
Font Mechanic Fonts 8-23
Font Utilities: 6
  FONT.DISPLAY 25
  FONT.SCALER 26
  FONT.CONVERT 26
  FONT.UPDATE 26
Other Programs: 27
  CAT.MENU 29
  READ.CATALOG 30
  TYPE.COMMAND 30
  FP 31
Technical Notes 31

The Font Mechanic Disks

Welcome to Font Mechanic! Before you get started, there are a few things you should know about the two disks that came with your package.

ProDOS and DOS 3.3

Two complete sets of Font Mechanic programs are included on two double-sided disks: a "ProDOS" version on both sides of one disk and a "DOS 3.3" version on both sides of the other.

Both versions work almost identically on any Apple II. The one you use is up to you; it depends on which Disk Operating System you want to use. You will probably always use the same version, so hide the other one now and you won't get confused.

In a way, it doesn't matter which version you use, because pictures, shape tables and fonts saved on disk may be converted (with some effort) from DOS 3.3 to ProDOS and back using the ProDOS CONVERT program or the IIc System Utilities Disk. Don't convert the Font Mechanic programs though--they will convert, but they won't work.

If you choose to use DOS 3.3, we highly recommend using Beagle Bros' ProntoDOS utility to triple the speed of loading and saving files.

BACK 'EM UP

Unlike most commercially available disks, Font Mechanic is not copy protected (just copyrighted). You should make a backup of your disks now with the copy program that came with your Apple. Store your originals in a safe place, away from magnetic fields (and little kids).

Since you're dealing with standard unprotected disks, you can move files from our disks to yours with any standard Apple file-transfer program.

And THANKS for not giving copies of our disks away. You support us and we'll support you.

SHAPE (or APPLE) MECHANIC REQUIRED
To use the fonts on the Font Mechanic disk, you will need the HI.WRITER or XTYPER programs from our Shape Mechanic or Apple Mechanic disks. To see the fonts, use the FONT.DISPLAY program (page 6), or turn to page 8.

PATH NOT FOUND PROBLEMS?
ProDOS frustrates us all with its "Path Not Found" message, when we know the file we are asking for is on a disk. The quickest fix we know of is to type "PREFIX/" or "PREFIX,D1" or "PREFIX,D2" (Return) before loading a file. "1" or "2" is the drive number. If you are still told "Path Not Found", it's probably legitimate, unless your disk has subdirectories (the Font Mechanic disk doesn't).

PRINTING ON YOUR PRINTER
Font Mechanic's fonts are meant for hi-res screen display. To print those screens on your printer, you must have (1) a graphics-capable printer and (2) a printer dump program like Beagle Bros' Triple-Dump disk, or a printer interface card like a "Grappler" that can print graphics.

BOOT SIDE 1
The backs of the two Font Mechanic disks are unbootable. Boot the front side (label-up) first to use the programs and files on either side. To boot, insert the disk in drive 1 and turn on your Apple.

You may use the Font Mechanic disks without booting if you first boot any standard disk (in the corresponding DOS) like the ProDOS User's Disk, the DOS 3.3 System Master, or one of the "system" disks that came with your Apple.

FORMATTING BLANK DISKS
Since the Font Mechanic disks are pretty full, any saving of files will have to be done on your own formatted (or "initialized") disks. Formatting instructions are included in your Apple manual. Be sure your disks match the version of Font Mechanic that you are using—ProDOS or DOS 3.3.

THE FONT MECHANIC CATALOG

If you type "CAT" (ProDOS) or "CATALOG" (DOS 3.3), you will see the following files on your disk:

FRONT OF DISK:

PRODOS and BASIC.SYSTEM (ProDOS disk only): Apple's ProDOS operating system.

STARTUP: This program runs when you boot the disk.

PIC.TITLE: The hi-res picture used by STARTUP.

FONT.DISPLAY: This program allows you to view the fonts on a particular disk.
(FONT.DISPLAY.ML is an accompanying file.)

FONT.SCALER: This program allows you to change the height and width of any font.
(FONT.SCALER.ML is an accompanying file.)

FONT.CONVERT: This program converts most other font formats to the format required by Font Mechanic, Shape Mechanic and Apple Mechanic.
(FONT.CONVERT.ML is an accompanying file.)

FONT.UPDATE: This program updates fonts from our Apple Mechanic & Typefaces disks so they will be compatible with Font Mechanic & Shape Mechanic.
(FONT.UPDATE.ML is an accompanying file.)

CAT.MENU: An easy to use Catalog Menu program.
(Accompanying files: CAT.MENU.ML, TYPE.COMMAND and READ.CATALOG (3.3 disk only.))

FP (ProDOS disk only): A program to clear memory.

BACK OF DISK:

F.AMERICAN, F.BELLS, etc.: All of the files that begin with "F." are type fonts.

USING FONT MECHANIC

To use the programs on the Font Mechanic disk, boot it by inserting it in drive 1 and turn on your Apple. If your Apple is already on, after inserting the disk, you can press Control Open-Apple Reset to re-boot. On older Apples you will have to type "PR#6", or turn your computer off and back on.

THE STARTUP MENU

Once you have booted, you will see the Font Mechanic title screen (above) along with a menu of available options:

```
[1] FONT.DISPLAY        [3] FONT.CONVERT
[2] FONT.SCALER         [4] FONT.UPDATE
                        [Q] QUIT
```

Press a number (1-4) to run the corresponding program. If you don't want to run one of the programs, press "Q".

PATH NOT FOUND?

If you get a Path Not Found message, you should probably boot the Font Mechanic disk and try again. Also, read the note on page 3.

The Font.Display Program

The FONT.DISPLAY program lets you see a list of all of the shape fonts on any disk. It also allows you to see a hi-res display of all the characters in any shape font. The font displays in this manual (pages 8-23) are hi-res screens made with this program.

To use Font Display, select "1" from the STARTUP menu, or type "RUN FONT.DISPLAY".

You will be asked to insert the disk with the fonts you want displayed. This could be the back of the Font Mechanic disk (that's where the fonts are) or the Shape Mechanic disk or any disk that has Beagle Bros' "shape fonts" on it. Just be sure the disk's DOS matches the version (ProDOS or DOS 3.3) of Font Mechanic that you are using.

See "About Font Names" (next page) if the program is not displaying the fonts you want.

After pressing the Return key (or typing a prefix), you will see a list of the fonts that were found on the disk. If no fonts were found, you will see an almost-blank screen instead. Press "/" to read another disk.

SELECT A FONT
To view the characters in a font, press the key matching the letter or number to left of the font name. The entire font will be loaded into memory and then displayed on the hi-res screen. While a font is being displayed, you have three options:

C: CHARACTER CODES
Press "C" to add the (A) ASCII Numbers or (S) Shape Numbers for every character in the displayed font. (These numbers are explained in your Shape Mechanic or Apple Mechanic manual.) Press "C" again to remove or change the numbers.

M: MENU
Press "M" to return to the main font menu so you can select another font for display.

ESC: QUIT
Press Esc to quit the program, with the font remaining on the hi-res screen. If you want, you may now save it on disk as a picture (see below) or print it out on your printer (see page 3).

If you should accidentally quit the program, just type "RUN" and it will start again.

ABOUT FONT NAMES
FONT.DISPLAY finds fonts by looking for binary files whose names begin with "F." or "|" (our old Apple Mechanic and Typefaces disks used font names like "|APPLE"). It is strongly recommended that you do not use a different naming system, although changing any old "|" names to "F." names wouldn't be a bad idea.

SAVING HI-RES SCREENS
For programmers: After you quit FONT.DISPLAY, you can save the font you see on disk by typing:
"BSAVE PICNAME, AS2000, LS2000"
You can get the font back on the screen by typing "HGR: POKE-16302,0" (Return) and then:
"BLOAD PICNAME, AS2000"

Font Mechanic Typestyles

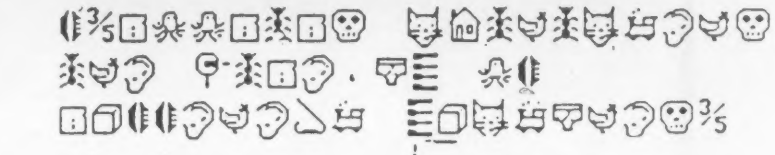
USE F.SCOREBOARD TO PUT YOUR NAME IN LIGHTS!!!

Please don't use Old English in all caps. THANK YOU!!

Dear Uncle Louie: I have been using F.Invitation font to write letters.

Jazz up your hi-res screens with some of our F.Hot.Sauce!

the only problem with this font (F.octalthorpe) is that it's kind of hard to read...



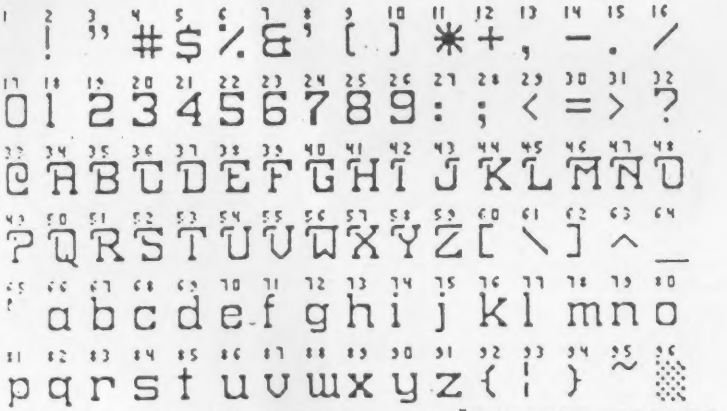
F.AMERICAN

F.AMERICAN

F.BELLS

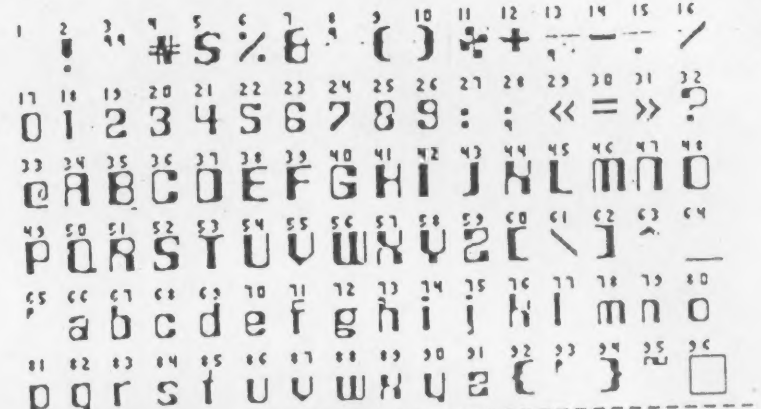
F.BELLS

F.BRANDING.IRON



F.BRANDING.IRON

F.COUNTDOWN



F.COUNTDOWN

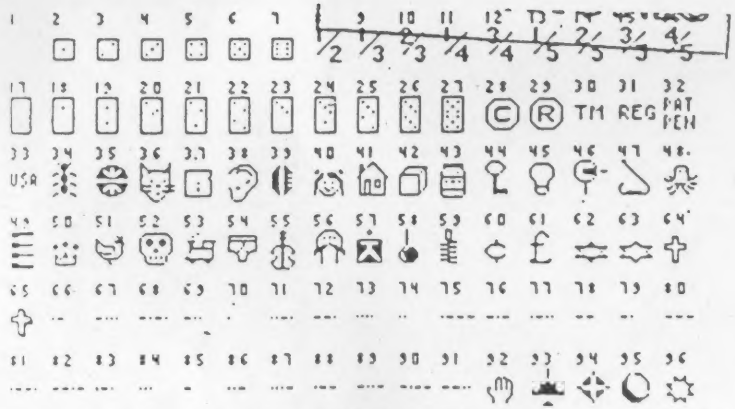
F.CRATE

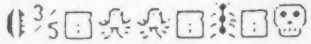
F.CRATE

F.DECO

F..DECO

F.DOODADS





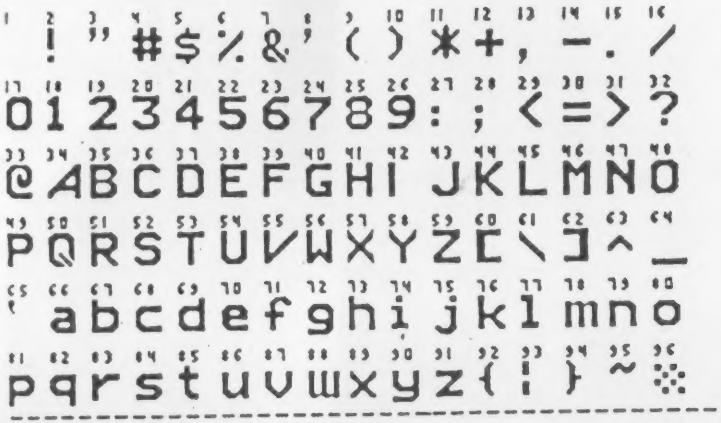
F.CAESAR

F.CAESAR

F.EDISON

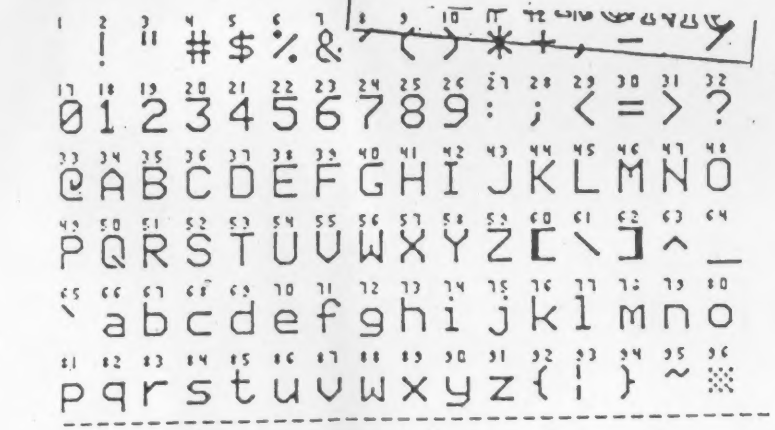
F.EDISON

F.GOTHIC



F.GOTHIC

F.GRADE.SCHOOL



F.GRADE.SCHOOL

F.HOLLYWOOD

F.HOLLYWOOD

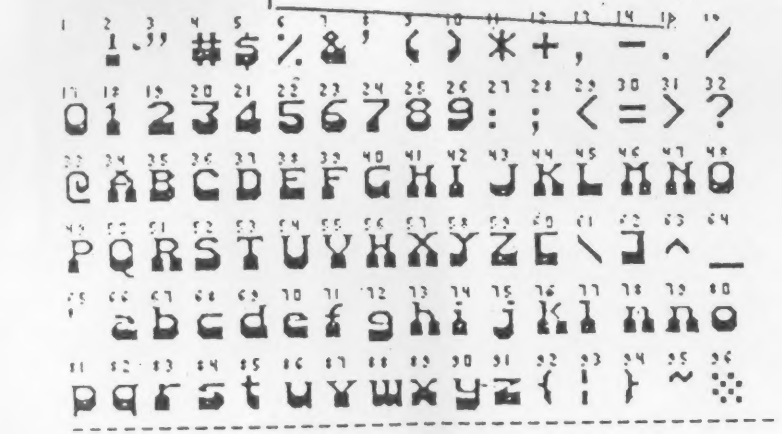
F.HOT.SAUCE

F.HOT.SAUCE

F.INVITATION

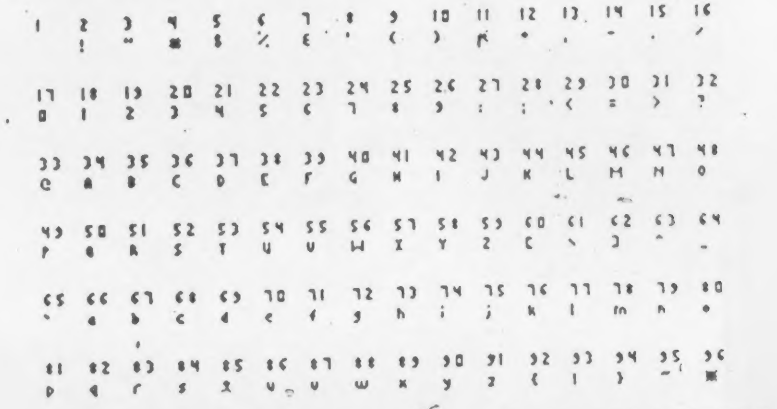
F.INVITATION

F.LEADFOOT



F.LEADFOOT

F.MINI

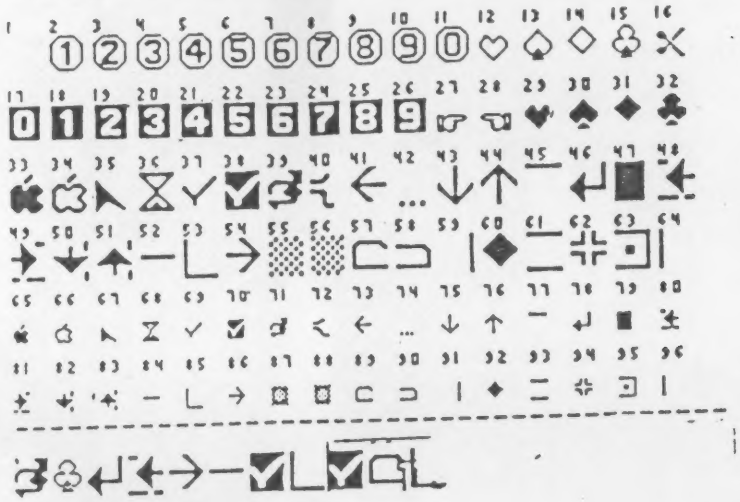


F.MINI

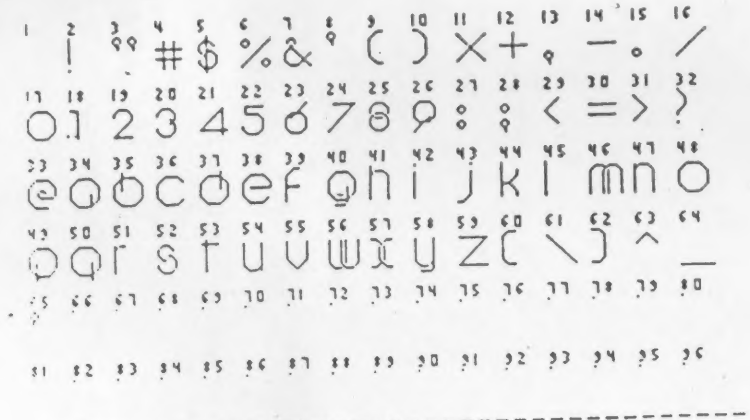
F.MONGOLIAN

F.MONGOLIAN

F.MOUSETEXT



F.OCTALTHORPE

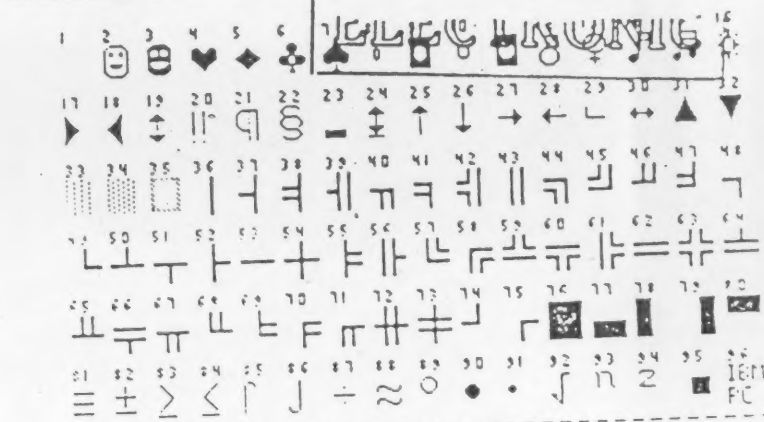


f.octalthorpe

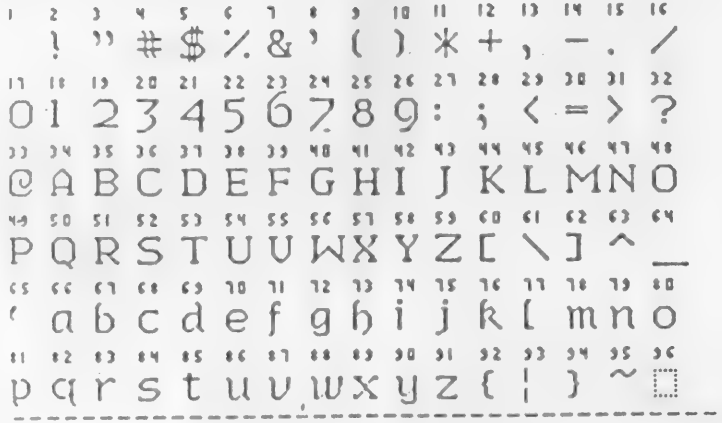
F.OLD.ENGLISH

F.OLD.ENGLISH

F.PC



F.ROOSEVELT

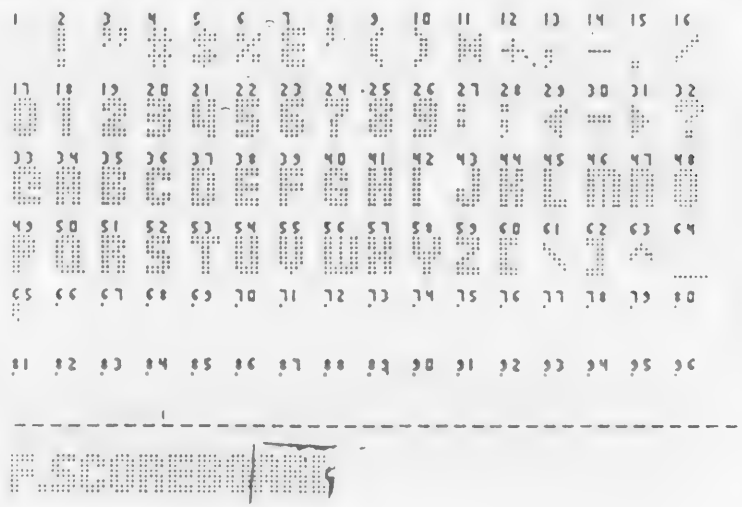


F.ROOSEVELT

F.SANDWICH

F.SANDWICH

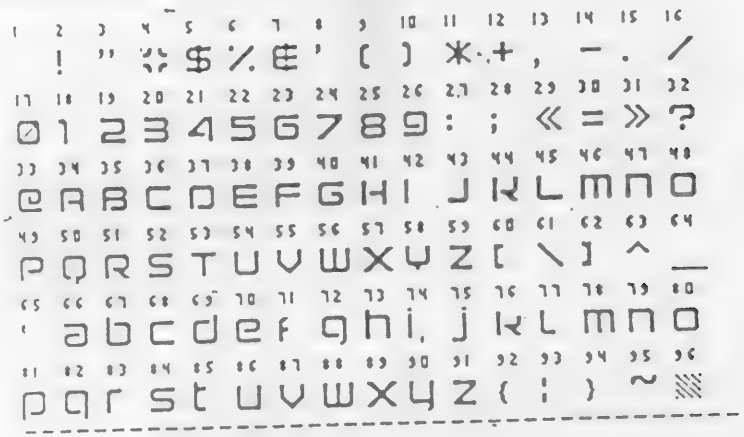
F.SCOREBOARD



F.SO.FINE

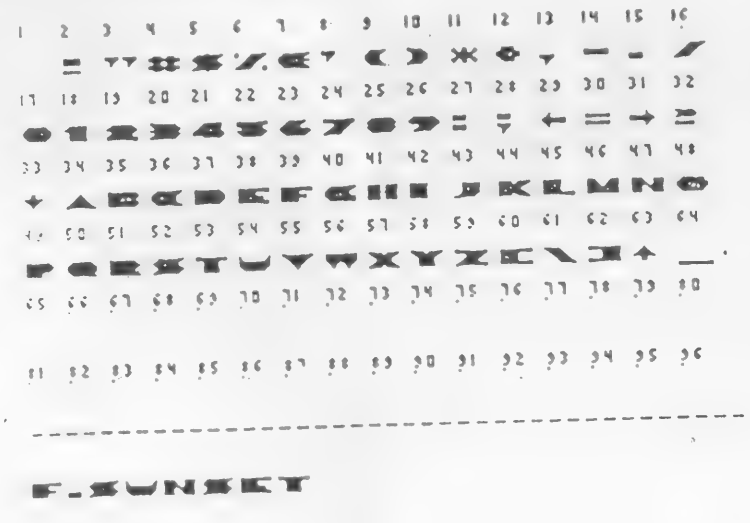
F.SO.FINE

F.SPACE



F.SPACE

F.SUNSET

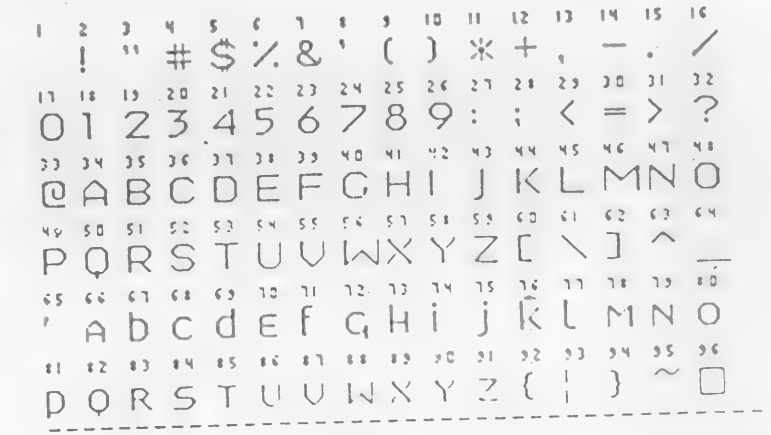


F.SUNSET

F.TIMES.ROMAN

F.TIMES.ROMAN

F.UNCLE

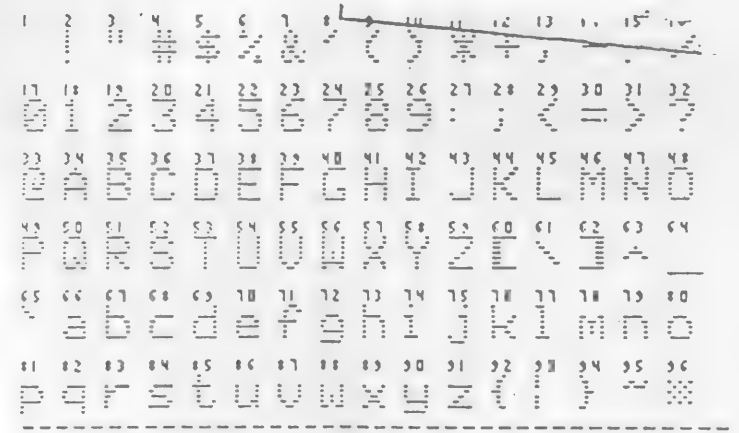


F.UNCLE

F.U.S.OPEN

F.U.S.OPEN

F.ZEBRA



F.ZEBRA

The Font Utilities

Three utilities on the Font Mechanic disk let you alter or convert fonts: FONT.SCALER, FONT.CONVERT and FONT.UPDATE. All of these programs have the following options in common:

L: LOAD A FONT
Press "L" to load a font. Then type the name of the font you want and press Return. Catalog with option "C" (below) if you can't remember a name.

If you don't want to load a font after all, press Return without typing a name.

S: SAVE A FONT
Press "S" to save an altered font on disk. Then type the name you want it saved under. We strongly recommend that you use font names that begin with "F.". And don't forget to make the save-name different than the file name you just loaded.

If you don't want to save a font after all, press Return without typing a name.

C: CATALOG THE DISK
Press "C" to catalog the disk and see what's there. In ProDOS, you may need to use Control-S to pause extra-long catalogs. At the end of the catalog, press any key to return to the main menu.

D: DRIVE (DOS 3.3 only):
Press "D" to change the slot (1-7) and drive (1-2) that will be used when you Load, Save and Catalog.

P: PREFIX (ProDOS only):
Press "P" to change the name of the disk that will be loaded from, saved to or cataloged. Then type in the prefix (usually a disk's name starting with a "/"; like "/DISK") and press Return.

Typing a slash ("/") (Return) will cancel the existing prefix. If you don't know the name of a new disk, type ",D1" or ",D2".

For a complete description of prefixes, refer to Apple's *BASIC Programming With ProDOS* manual.

Q: QUIT
Press "Q" to quit the program, leaving the font visible on the hi-res screen. If you change your mind, type "RUN", and the program will start again.

Font.Scaler

To use Font Scaler, select "2" from the STARTUP menu or type "RUN FONT.SCALER".

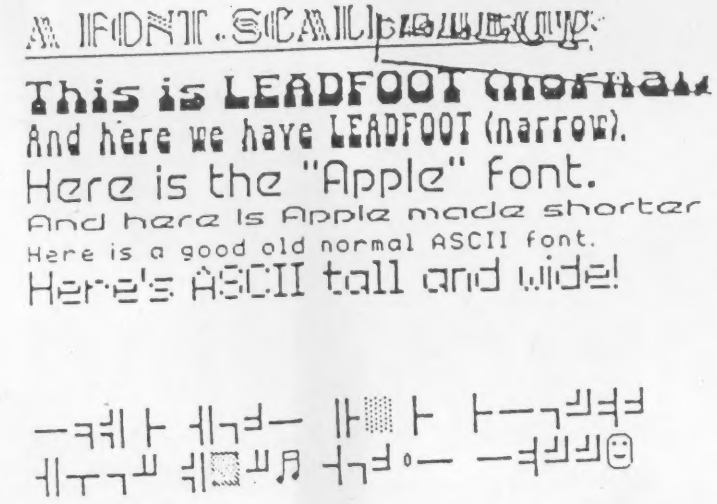
FONT.SCALER lets you change the vertical and/or horizontal dimensions of all the characters in a font. It lets you view this process on the hi-res screen as it is happening.

E: EDIT A FONT
After you have loaded a font (option "L"), press "E" to edit it. Now you can make the entire font taller, shorter, wider or narrower by pressing "T", "S", "W" or "N" (Return). The altered font will be seen on the right side of the screen.

Important: Enlarging some large-character fonts will make its characters unreadable. Only use options "S" or "N" on large fonts.

You may also specify use a combination of options. "TW" will make all characters taller and wider (maximum size), "SN" will make all characters shorter and narrower, and so on. If you think about it, "TS" and "WN" won't change anything.
To return to the main menu, press Esc.

Other options: See page 24



FONT.CONVERT

To use Font Convert, select "3" from the STARTUP Menu or type "RUN FONT.CONVERT".

FONT.CONVERT converts almost any kind of non-Mechanic font into "shape fonts" that work with Shape Mechanic, Apple Mechanic and Font Mechanic. Fonts on Beagle Graphics, DOS Tool Kit, Higher Text, Higher Fonts and the Penguin disks can be converted.

L: LOAD AND CONVERT A FONT
Press "L" to load almost any non-Mechanic font to be converted. After pressing "L", type the name of the desired font and press Return. After a font is loaded, it is immediately converted to Mechanic format and is ready to be saved (press "S").

Other options: See page 24.

FONT.UPDATE

To use Font Update, select "4" from the STARTUP Menu or type "RUN FONT.UPDATE".

This program lets you update old fonts from our Apple Mechanic and Typefaces disks so they are more compatible with Font Mechanic and Shape Mechanic. All unused bytes are removed from the font and three new shapes are added to the end to allow different kerning values.
Old Apple-Mechanic fonts that haven't been updated will work just fine with Shape Mechanic. They are only slightly less efficient and can't handle different letter-spacing (or "kerning").

L: LOAD A FONT
Press "L" to load any old font for updating. After a font is loaded, it is immediately updated and ready to be saved.

Other options: See page 24.

CAT.MENU

To use Cat Menu, type "RUN CAT.MENU".

CAT.MENU will display all of a directory's file names (or only the ones you want) on the screen for easy one-key cursor selection.

You will soon see a special catalog of the files on the disk. Free space on disk is displayed in the upper-right corner of the screen.

MOVING THE CURSOR
The cursor is an inverse "arrow" that points at an individual file name. The Arrow keys move the cursor up and down. The "<" and ">" keys move the cursor forward and back a page (20 file names).

[S] SORTING FILE NAMES: Press "S" to alphabetize the files on the screen (not on the disk itself).

[C] CATALOG THE DISK: Press "C" for a normal catalog of the current disk. Under ProDOS, you may need to press Control-S to pause long catalogs.

[P] PREFIX (ProDOS only; see page 24): Press "P" to see and/or type in a new disk or directory name.

[1] or [2] DRIVE: Press "1" or "2" read a new disk in Drive 1 or 2.

[R] RUN A FILE: Press "R" to "run" the program at the cursor. "R" will RUN an Applesoft program, BRUN a binary file, EXEC (execute) a text file, and "-" a ProDOS System file.

[L] LOAD A FILE: Press "L" to load or display the file at the cursor. "L" will LOAD an Applesoft program, BLOAD a binary file, and TYPE a text file.

[H] HELP: Press "H" for a list of commands.

[Q] QUIT: Press "Q" to quit CAT.MENU. If you accidentally quit, type "RUN CAT.MENU" and will start again.

MOVING CAT.MENU TO ANOTHER DISK
If you want to transfer CAT.MENU to another disk, you will need to transfer all of these files:

1. CAT.MENU
2. CAT.MENU.ML
3. TYPE.COMMAND
4. READ.CATALOG *(in DOS 3.3 only)*

Files may be transfered from disk-to-disk with many programs on the market, including FID, FILER, FILE.MOVER and others. One of these probably came with your Apple.

DISPLAYING ONLY CERTAIN FILES
For Programmers Only: To make CAT.MENU display only certain kinds of files, change the variables in line 4 of the CAT.MENU program. But first, read the Warning below.

DOS 3.3 CAT.MENU:

```
4  L=1: U=1: T=1: I=1: A=1: B=1: S=1: R=1: SO=0
```

The first 8 variables above stand for Locked, Unlocked, Text, Integer, Applesoft, Binary, Source, and Relocatable. Setting a variable to 1 means that kind of file will be displayed. Zero means it will not be displayed.

The variable SO (Sorted) determines whether or not files should automatically be sorted when they are first displayed.

ProDOS CAT.MENU:

```
4  L=1: U=1: T=1: A=1: B=1: S=1: O=1: SO=0
```

The first 8 variables above stand for Locked, Unlocked, Text, Applesoft, Binary, System, and Other. (There are so many "Other" file types available under ProDOS that it isn't practical to have a variable for each one.) SO stands for Sorted, just like in DOS 3.3 (above).

WARNING: If you change this program, make sure you have just loaded it. This program (like most others on the Font Mechanic disk) deletes one or more of its lines when it ends.

READ.CATALOG (DOS 3.3; for programmers only)

READ.CATALOG converts DOS 3.3 catalogs into a string array, so your programs can more easily access the files on a disk. To see how this program is used, list lines 4, 5, and 12-17 of the CAT.MENU program. Basically this is what you do to read a DOS 3.3 catalog.

1. BLOAD READ.CATALOG
2. LET RC=7168 (7168 is its location: $1C00).
3. DIM CA$(N) (N=number of files; 255 max.).
4. Poke the file types to read (0=No, 128=Yes):
   POKE RC+ 5,# (Locked)
   POKE RC+ 6,# (Unlocked)
   POKE RC+ 7,# (Text)
   POKE RC+ 8,# (Integer)
   POKE RC+ 9,# (Applesoft)
   POKE RC+10,# (Binary)
   POKE RC+11,# (Source)
   POKE RC+12,# (Relocatable)
5. POKE RC+15,drive (1 or 2).
6. CALL RC
7. ?PEEK(RC+3) to see if there was an error:
   8=I/O Error, 108=Undim'd, 109=Too Many Dim's.
8. ?PEEK(RC+4) to see how many files were read.
9. ?PEEK(RC+13)+PEEK(RC+14)*256 for free sectors.

Note: READ.CATALOG is only on the DOS 3.3 Font Mechanic disk because DOS 3.3 provides no easy way to read the catalog from within a program. To see how easy this is under ProDOS, see page 226 of the *BASIC Programming With ProDOS* manual.

The TYPE COMMAND

To install the command, type "BRUN TYPE.COMMAND".

This program adds a new "TYPE" command to your repertoire. Typing "TYPE filename" will then print the contents of any text (T or TXT) file on the screen or on your printer.

The CAT.MENU program does a "BRUN TYPE.COMMAND" as part of its setup procedure. So another way to acquire TYPE is to RUN CAT.MENU and quit.

When using TYPE, a file name is required. For example, you would type "TYPE LETTER" to see some text file called "LETTER". Slot and drive are optional (for example, type "TYPE LETTER, S6,D2").

While viewing a file, you can press Esc to quit, Control-S to pause, and then any key to resume. If you want to send a text file to your printer, turn it on and type "PR#1" (Return). Then type "TYPE filename".

FP (ProDOS only)

To use FP, type [illegible]

FP is a little Applesoft program that "cleans up" memory under ProDOS.

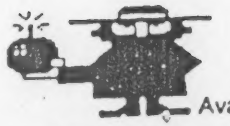
FP is similar to the DOS 3.3 "FP" command, but in many respects is more powerful. It frees up any buffers that ProDOS may have allocated to programs (like the TYPE.COMMAND). It also resets the I/O hooks. If you're really interested in what else it does, load it, list it and read the Rem's.

MAKING CHANGES TO OUR PROGRAMS?
We suggest that you not make any changes to any of the programs on the Font Mechanic disk. If you decide to, however, make sure that you do so on a backup copy of the disk. This will ensure that you always have a good, working copy of each program. Also, make sure that you make your changes on a fresh (just loaded) copy of the program that hasn't been run. Most programs on the Font Mechanic disk delete one or more lines upon ending.

DOS 3.3 MOVED? NO PROBLEM
All programs on the DOS 3.3 Font Mechanic disk will operate correctly even if DOS has been moved to the language card (also called "RAM card" or "bank-switched memory"). They are also completely compatible with Beagle Bros' ProntoDOS (naturally).

Use UPPER CASE File Names!

All Font Mechanic programs accept UPPER and lower case for file names being saved on disk. You should always use UPPER CASE for file names, especially in DOS 3.3.



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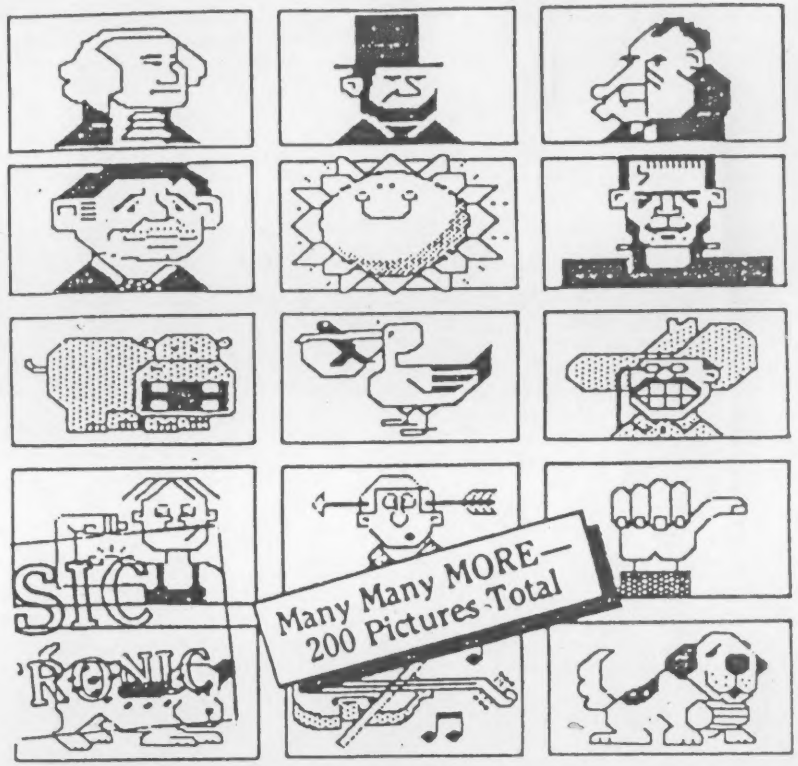

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